[0008] In further embodiments, the sensor data can include image data, and the instructions can be further configured to cause the one or more processors to perform operations including: tracking a movement of an object in the one or more rooms, where determining the type of the at least one of the one or more rooms is further based on at least one of: an amount of time the object has spent in the one or more rooms, the amount of time based on the tracked movement of the object; and a traffic pattern of the object in the one or more rooms, the traffic pattern of the object based on the tracked movement of the object. In some cases, the sensor data can include audio data, and wherein the instructions are further configured to cause the one or more processors to perform operations including: tracking a movement of an object in the one or more rooms, where determining the type of the at least one of the one or more rooms is further based on at least one of: an amount of time the object has spent in the one or more rooms, the amount of time based on the tracked movement of the object; and a traffic pattern of the object in the one or more rooms, the traffic pattern of the object based on the tracked movement of the object.

[0009] In certain embodiments, a system comprises: one or more processors; and one or more non-transitory, electronic storage mediums that include instructions configured to cause the one or more processors to: receive floor plan data corresponding to at least one of a location, dimensions, or orientation of one or more walls defining at least one room of a building; receive sensor data corresponding to detected activity within the at least one room of the building: determine a type of the at least one room of the building based on the detected activity; and modify the floor plan data to include the determined type of the at least one of the one or more rooms, wherein a visual representation of the floor plan data is operable to be output on a display device. In some implementations, the instructions can be further configured to cause the one or more processors to: determine an area of the at least one room of the building, where determining the type of the at least one room is further based on the area of the at least one room. In some cases, the floor plan data may include a plurality of rooms, and determining the type of the at least one room can be further based on the location of the one room relative to locations of the remaining plurality of rooms.

[0010] In some embodiments, the sensor data can include image data, and the instructions can be further configured to cause the one or more processors to: track a movement of an object in the one or more rooms, where determining the type of the at least one of the one or more rooms is further based on at least one of: an amount of time the object has spent in the one or more rooms, the amount of time based on the tracked movement of the object; and a traffic pattern of the object in the one or more rooms, the traffic pattern of the object based on the tracked movement of the object. Alternatively or additionally, the sensor data can include audio data, wherein the instructions are further configured to cause the one or more processors to: track a movement of an object in the one or more rooms, where determining the type of the at least one of the one or more rooms is further based on at least one of: an amount of time the object has spent in the one or more rooms, the amount of time based on the tracked movement of the object; and a traffic pattern of the object in the one or more rooms, the traffic pattern of the object based on the tracked movement of the object.

[0011] This summary is not intended to identify key or essential features of the claimed subject matter, nor is it intended to be used in isolation to determine the scope of the claimed subject matter. The subject matter should be understood by reference to appropriate portions of the entire specification of this disclosure, any or all drawings, and each claim.

[0012] The foregoing, together with other features and examples, will be described in more detail below in the following specification, claims, and accompanying drawings.

BRIEF DESCRIPTION

[0013] Aspects, features and advantages of embodiments of the present disclosure will become apparent from the following description of embodiments in reference to the appended drawings.

[0014] FIG. 1 shows a simplified diagram of a conventional power outlet in a residential, commercial, or industrial environment.

[0015] FIG. 2A shows a simplified diagram of a wall-mounted host unit, according to certain embodiments.

[0016] FIG. 2B shows a rear view of a simplified diagram of a wall-mounted host unit, according to certain embodiments.

[0017] FIG. 3A shows how a modular accessory can be coupled to a wall-mounted host unit, according to certain embodiments.

[0018] FIG. 3B shows how a modular accessory can be coupled to a wall-mounted host unit, according to certain embodiments.

[0019] FIG. 4 shows a simplified block diagram of a system for operating a host unit, according to certain embodiments.

[0020] FIG. 5A shows a simplified diagram of a typical modular accessory, according to certain embodiments.

[0021] FIG. 5B shows a simplified diagram of a typical modular accessory, according to certain embodiments.

 $\cite{[0022]}$ FIG. 5C shows a simplified diagram of a typical modular accessory, according to certain embodiments.

[0023] FIG. 5D shows a simplified diagram of a typical modular accessory, according to certain embodiments.

[0024] FIG. 5E shows a simplified diagram of multiple modular accessories integrated with a single host unit, according to certain embodiments.

[0025] FIG. 6 shows a sequence chart showing an operation of a bootstrapping protocol for modular accessories, according to certain embodiments.

[0026] FIG. 7 shows a simplified diagram of a number of host units in communication with one another in a configurable home infrastructure, according to certain embodiments

[0027] FIG. 8 shows a simplified diagram showing an automatically generated floor plan for a home, according to certain embodiments.

[0028] FIGS. **9**A-**9**C show various stages of determining a floor plan for a building, according to certain embodiments.

[0029] FIG. 10 shows a typical configuration of a plurality of a modular accessories, host units, and a brain, according to certain embodiments.

[0030] FIGS. 11A-11C show a number of possible node, aggregator, brain network configurations, according to certain embodiments.